

EPA Region 5 Records Ctr.



246960

1 IN RE:

2  
3 QUINCY DRUMS, )  
4 QUINCY, ILLINOIS )5 DEPOSITION OF WITNESS, produced, sworn and examined  
6 on the 5th day of March, 1990, between the hours of eight  
7 o'clock in the forenoon and six o'clock in the afternoon of  
8 that day, at the offices of Federal Courthouse, in the City  
9 of St. Louis, before Jeanne M. Morgan a Certified Shorthand  
10 Reporter and Notary Public, within and for the County of St.  
11 Louis, State of Missouri, taken on behalf of the U.S. EPA.

## 12 APPEARANCES:

13 For EPA

Stuart P. Herish  
230 S. Dearborn Street  
Chicago, IL 60604

14 For Witness

Armstrong, Teasdale, etc.  
One Metropolitan Square  
St. Louis, MO 63102  
By: Douglas Sprong

## PERRY REPORTING SERVICE

NICHOLAS TUNGATE

of lawful age, being first duly sworn to tell the truth the whole truth, and nothing but the truth, deposes and says on behalf of the EPA as follows:

## DIRECT EXAMINATION

QUESTIONS BY MR. HERSH:

MR. HERSH: We are on the record. Should we stipulate to the certification of the swearing in of the witness and sealing of the deposition?

MR. STRONG: Yes.

MR. HERSH: Did you want your client to sign the deposition, review it and sign?

MR. STRONG: Do you want to read through it?

THE WITNESS: Yes.

MR. HERSH: Okay we'll do that. I will ask that the court reporter send the draft to your office or directly to --

MR. STRONG: Send it to me. That's fine.

(By Mr. Hersh) And then you will review it, comment, and sign. This is the deposition of Mr. Nick Tungate, taken pursuant to notice and authority under CERCLA, Comprehensive Response Compensation and Liability Act as amended by SARA, the Superfund Amendments and Reauthorization Act. My name is Stuart Hersh, I'm an attorney for U.S. EPA. With me is Walter Nied, who is RPH on the Quincy Drum site --

1 OGC, excuse me.

2 We are here for the purpose of asking questions  
3 regarding disposal practices at Quincy Drum site as well as  
4 questions, particularly during the year 1986 as well  
5 regarding the generation and transportation of wastes to the  
6 Quincy Drum site. The questions asked are to be answered  
7 with your personal knowledge as well as any document you have  
8 knowledge of pertaining to the question. If you do not hear  
9 a question, say so and I'll repeat it. If you do not  
10 understand a question, say so and I'll try to rephrase it.  
11 If you realize that you've given an answer earlier in the  
12 discussion which was inaccurate or incomplete, say that you  
13 want to correct it to amend it to add to it, to supplement it  
14 and you will be allowed to do so. If you want to stop to use  
15 the restroom, to cool off because it's so warm in here, to  
16 get a cup of coffee or glass of water, to collect your  
17 thoughts, to stretch your legs. Just say so, we'll take a  
18 break. If you find that you're tired, confused, you want to  
19 take a short break let me know and I'll take a recess. If  
20 you do not know or do not remember the information necessary  
21 to answer a question, say so. If you answer the question, I  
22 will assume that you have heard it, that you understand it,  
23 and that you have given me your best recollection of the  
24 answer. Do you understand the instructions that I've given  
25 you?

1 A Yes.

2 Q Your answers to the questions are to be complete  
3 to the best of your knowledge. If there is a document or  
4 other material which may refresh your recollection, please  
5 identify the document or material. Have you ever given a  
6 deposition regarding wastes in the Mississippi River?

7 A No.

8 Q Have you ever given a deposition regarding the  
9 Quincy Bayview Bridge project?

10 A No.

11 Q You are to testify truthfully to the best of your  
12 ability as if you are testifying in a court of law. In order  
13 to assist the reporter, I ask that you not nod your head or  
14 provide other nonverbal responses. Take the time to answer  
15 questions carefully and thoughtfully. And if you have any  
16 questions for me, please interrupt me and ask me whatever the  
17 situation may be. Do you understand all of these  
18 instructions?

19 A Yes, I do. The initials that you gave him, what  
20 does that stand for?

21 MR. NIED: I'm the on-site coordinator and I  
22 actually retrieved the drums last October from the bottom. I  
23 do the underwater work for region 5.

24 THE WITNESS: Okay.

25 MR. NIED: On-site coordinator under emergency

1 response.

2 Q (By Mr. Berch) CSC being on-site coordinator.

3 A I understand.

4 Q Would you please state your name for record?

5 A I'm Nicholas Clark Tugate.

6 Q What is your birthdate?

7 A 8-17-36.

8 Q And where do you presently reside?

9 A In St. Peters, at 779 Old Highway 79, St. Peters,  
10 Missouri.

11 Q How long have you lived at that address?

12 A Approximately 25 years.

13 Q Do you have any plans in the near future to move  
14 from that address?

15 A No.

16 Q What is your educational background?

17 A High school and some classes in excess of that.

18 Q What type of classes?

19 A Management classes, technical classes.

20 Q Management with regard to?

21 A Construction management and those classes would  
22 have been taken at UMSL and Florissant Valley.

23 Q What is your Social Security number?

24 A 496-36-8736.

25 Q And for the record, are you represented by counsel

## PERRY REPORTING SERVICE

1 today?

2 A Yes, I am.

3 Q Who would that be?

4 A Mr. Doug Sprong with Armstrong and Teasdale.

5 Q Did you do anything to prepare for this deposition  
6 today?

7 A We had a meeting yesterday where we discussed with  
8 our attorneys for -- I don't know how long it lasted 30 or 40  
9 minutes.

10 MR. SPRONG: Thereabouts.

11 THE WITNESS: We discussed the upcoming  
12 deposition.

13 Q (By Mr. Hersh) Have you looked at any documents?

14 A No.

15 Q Did you bring any documents with you today?

16 A No, I didn't.

17 Q Did you do anything else to prepare for this  
18 deposition?

19 A No.

20 Q Have you talked to anyone else?

21 A Conversation that I've had in regards to the  
22 Quincy bridge -- if this is what we're talking about, have  
23 been just verbal conversations by phone to different members  
24 of our company answering their questions, which was pretty  
25 straight forward, simple stuff. Gee, did we drop any barrels

1 in the bridge or not.

2 Q Who did you talk to?

3 A Tim McCarthy.

4 Q Anyone else?

5 A Bill Nash. Those are the two people.

6 Q There was no one else?

7 A Except for the discussion we had yesterday.

8 Q Are you presently employed?

9 A Yes, I am.

10 Q Where are you employed?

11 A I'm still employed by McCarthy Brothers  
12 Construction.

13 Q How long have you been employed there?

14 A Approximately 23 or 24 years..

15 Q And what's your position?

16 A I'm project manager.

17 Q And what do you do as project manager?

18 A You're asking the definition of project manager?

19 Q Yes.

20 A It's very difficult to give you because on  
21 different jobs require different levels of effort.

22 Generally, I'm in charge of overall coordination of the  
23 project.

24 Q Okay. How long have you been a project manager  
25 for McCarthy Brothers?

1 A 1962 approximately.

2 Q And before that what was your position?

3 A Superintendent.

4 Q For projects or for -- what does that entail?

5 A Generally it's difference in title. Years ago we  
6 were called superintendents, as the jobs increase in need or  
7 size of jobs increase or for more people on the job then the  
8 title change to project manager. Today a project manager is  
9 still a position. The superintendent was 10 years ago, but  
10 now he has more people working under him and you have people  
11 called superintendents. That is a step down.

12 Q Would a deputy -- is that what they are?

13 A A superintendent is a step below a project manager  
14 at this state.

15 Q How long were you a superintendent?

16 A Probably since 1960, '55 or '60, in that  
17 approximate area.

18 Q Are you familiar with what was has become known as  
19 Quincy Drum Site?

20 A Just through information I've received from our  
21 office and I read an article on something about muscle  
22 divers, probably in the paper, and I forget exactly when that  
23 was.

24 Q What is your understanding of what the Quincy Drum  
25 Site means, what is it?



## FERRY REPORTING SERVICE

1 A As I understand it, there's apparently some  
2 chemicals underwater that somebody is investigating to see  
3 what chemicals there are and who deposited them.

4 Q Are you familiar with the Quincy Bayview Bridge  
5 Project?

6 A Yes.

7 Q When did that occur?

8 A 1984, it started in 1984 and ended in -- I wasn't  
9 on the job at the end, it ended in 1987.

10 Q So from '84 to '87?

11 A Right. That's correct.

12 Q And when you were employed on that project, what  
13 was your position?

14 A I was project manager.

15 Q For the entire time period?

16 A For the time period that I was there.

17 Q When was that?

18 A From approximately June, July of 1984 through  
19 December of 1986.

20 Q What was the project purpose?

21 A It was to build a bridge to connect Missouri and  
22 Illinois for highway traffic. I forget the name of the  
23 highway number, but the name of new bridge was Quincy Bayview  
24 Bridge.

25 Q And it was adjacent to the Quincy Memorial Highway

1 Bridge?

2 A Yes, it was north of that.

3 Q What were your responsibilities specifically on  
4 that project?

5 A We built -- the superstructure was by prior  
6 contractors, and had it out of the water by 10 feet and we  
7 took it from that point. The superstructure then would be  
8 the completion of that portion of the bridge. We built  
9 approximately 1800 foot of cable stay bridge and about 400  
10 foot of approach ramp, and joined to these what a prior  
11 contractor had already installed, connected those portions.

12 Q Did you do anything else on that project?

13 A That's the essence of the job.

14 Q Who did you report to?

15 A To two people. Originally, it was Tom McCarthy  
16 and approximately six months after the project started it  
17 would have been Bill Main.

18 Q And who reported to you, everyone on the site?

19 A Yes, all supervisors.

20 Q And these activity to construct the Quincy Bayview  
21 Bridge, were they done under a contract?

22 A Yes.

23 Q Who was that with?

24 A Department of Illinois. I mean Department of  
25 Transportation, Illinois. It was a joint venture with

1 Missouri and Illinois with Department of Transportation.

2 With Illinois actually supervising the inspection.

3 Q And when was the contract effective?

4 A Would you repeat that?

5 Q When was the contract effective, when was it?

6 A In February, I forget the exact date, but roughly  
7 February of '64.

8 Q Were there any other contracts on that bridge  
9 project?

10 A The other contractors.

11 Q That McCarthy Brothers was involved in, let me  
12 clarify that?

13 A What are you looking for, would you repeat that?

14 Q Were there any other contracts other than the  
15 February -- approximately February, I'm not trying to hold  
16 you to that specific date?

17 A No, that was the contract.

18 Q In the course of activity on the Bayview Bridge  
19 project, did McCarthy Brothers company obtain chemicals,  
20 paints, and other materials or equipment for the project?

21 A Yes.

22 Q What kind of materials did they obtain?

23 A We had to use -- specifically you mentioned paint,  
24 Joanna Painting Company supplied and painted the structure,  
25 they were a subcontractor.

1 Q Were there any other materials, chemicals?

2 A There was a material that we purchased to connect  
3 the pre-cast panels on top of the structure, it was --

4 Q What was that material?

5 A It was an epoxy adhesive.

6 Q Do you have a name for it?

7 A Yes, I believe it's -- do you mind if I look?

8 Q I'm sure it's the Concrecessive material.

9 A Concrecessive that was used to connect the panels  
10 together on the structure.

11 Q Any other materials?

12 A There was epoxy paint that was used to paint the  
13 sides and part of the roadway slabs, two-part type of paint.

14 Q What are the names?

15 A Penn Seal and the other was Metacote. Metacote  
16 was primer and Penn Seal was top coat.

17 Q Any other materials?

18 A Well, there was curing compounds that you use for  
19 curing your concrete when you strip your forms.

20 Q And does that have a name or chemical description?

21 A The name of the material right now -- well, I can  
22 guess. Concrete curing compounds are very common and I  
23 really -- there are so many sources of them. I believe we  
24 bought Sealtight material curing compound.

25 Q Were there any other materials?

1           A       There was -- we bought two chemicals that we had  
2 intended to use to clean epoxy covered tools, and that was  
3 methylene chloride and trichloroethane.

4           Q       And you stated that you intended to use?

5           A       Yes.

6           Q       What do you mean by that?

7           A       That means that we never used them.

8           Q       What did you use to clean the epoxy?

9           A       We threw the tools away. We had originally  
10 figured on spraying the materials. And we changed to using  
11 rollers and pans and at the end of the day just pitching them  
12 in the dumpsters.

13          Q       So, initially you had used other tools that you  
14 were going to try and clean?

15          A       That was the intention at one time.

16          Q       Was there any initial efforts to clean tools and  
17 then later --

18          A       No.

19          Q       So these drums were complete and full?

20          A       Right, they were full.

21                 MR. NIED: As far as excess, I'm talking about  
22 access when they applied it whether or not did you remove  
23 that with tools or did you remove that mechanically?

24                 THE WITNESS: Remove what, sir?

25                 MR. NIED: Well, wasn't your epoxy used to

## PERRY REPORTING SERVICE

1 bond concrete surfaces, correct?

2 THE WITNESS: No, it was used as a paint. As a  
3 layman, you would say it was used as paint and protective  
4 seal on top of the concrete.

5 Q (By Mr. Perch) We're talking about two different  
6 opinions. For the record, Glen Sanders, who's representing  
7 the State of Illinois Department of Conservation has just  
8 entered the room and will be sitting in on this deposition of  
9 H. Tanager. The question I think is hard to understand  
10 simply because there are two sets of epoxies. As I  
11 understand it, there is epoxy adhesive and epoxy paint?

12 A That's correct.

13 Q With regard to the epoxy adhesive, was there  
14 bonding material?

15 A No.

16 Q How was the material applied?

17 A It was applied with rubber gloves.

18 Q And was there any other way of applying it?

19 A There may be. We used rubber gloves.

20 Q The entire time during the project?

21 A Right.

22 Q And with regard to the epoxy paints, the Penn Seal  
23 and Metacote, what was the method of application?

24 A That was applied with use of a roller and a pan  
25 like you would normally see in a household except ours were

1 two foot wide in lieu of normal nine inches.

2 Q Was that the only method that was utilized on the  
3 Bayview Bridge project?

4 A That's correct.

5 Q There was no other method?

6 A No.

7 Q Does that answer your question?

8 MR. NIED: Can I have one follow-up? I  
9 understand the difference --

10 Q Off the record.

11 (At this time an off-the-record discussion was had)

12 MR. BERSH: Back on the record and we are now  
13 going to continue our discussions of the compressive epoxy  
14 adhesive. At this point, since we are addressing some very  
15 particular technical questions, I will ask that Mr. Nied ask  
16 the questions.

17 MR. NIED: Upon coating two concrete surfaces  
18 that were to be bonded together with the epoxy, when that was  
19 actually connected and there was excess at those joints, how  
20 was that removed?

21 THE WITNESS: Okay. The standard way was to  
22 use a wood wedge, scrape it off, put it back into the pot  
23 that you mixed it in.

24 MR. NIED: Any residual remaining after the  
25 wedge?

1 THE WITNESS: The residuals that were remaining  
2 would be covered with black top.

3 MR. NIED: So there wasn't any need to remove  
4 that with solvents?

5 THE WITNESS: No. No need to use solvents.

6 MR. NIED: So, no concern over the asphalt  
7 bonding to that surface?

8 THE WITNESS: No.

9 (By Mr. Hersh) Were there any other materials?

10 A You're asking me a question -- in construction  
11 everything has got chemicals in it, you know. So you're  
12 asking me a general question that you could really get into,  
13 but when you're talking about these kinds of materials you're  
14 talking about the extent that we're at now as far as my  
15 knowledge is.

16 Q Could you just give us a brief list the other  
17 chemicals then that you think are out there?

18 A We would say the curing compounds would be a major  
19 source of chemicals, the epoxy concrete would have been a  
20 major source of materials, and the Penn Seal and Metacote  
21 would have been major source of materials.

22 Q I'm not talking in materials of volumes, I'm  
23 talking in terms of what are the categories of materials?

24 A Fuel oil that was stored on site, motor oil that  
25 was stored on the site. And you can talk about gasoline that



## PERRY REPORTING SERVICE

1 was stored on the site.

2 Q Were there other solvents?

3 A Not to my knowledge.

4 Q Organic chemicals?

5 A Except we already talked about paint.

6 Q Other than what we talked about?

7 A To my knowledge, there were none.

8 Q Were there any chemicals that were flammable that  
9 were on the site.

10 A He named oil and gasoline.

11 Q Any others?

12 A That would have been it.

13 Q Were there any chemicals that were corrosive?

14 A In excess of what we already talked about, not  
15 that I'm aware of.

16 Q Were there any chemicals that are considered to be  
17 hazardous or toxic beyond those that we talked about already?

18 A Not that I'm aware of, no.

19 Q Where were these materials stored?

20 A Which materials.

21 Q The chemicals that we've been talking about?

22 A They were stored in different areas. Just name  
23 which one you want to talk about and I'll tell you.

24 Q How many different storage areas were there?

25 A There was two. One is the land site and the

1 barge. Most of the materials were stored -- storage was on  
2 land generally above the shear wall near the public access  
3 ramp.

4 Q And that's for both storage areas or does that  
5 describe one of the storage areas?

6 A Our construction limits -- we were confined when  
7 we started this project. We were confined to only the areas  
8 where the shear wall was. We couldn't get any lower areas.  
9 We were confined to the upper level. We were approximately  
10 12 to 14 feet above flood stage where our office and all that  
11 was. Our storage area was very small.

12 Q And about approximately how far above flood stage  
13 were the storage areas?

14 A The same. They were all up above the shear walls.

15 Q Could you, so I can better understand this, could  
16 you draw a map of the bridge area that you remember from the  
17 1986 time period and include as many --

18 A I forget the name of the road, but I believe it  
19 was Main Street. And there was a river road and public  
20 access ramp. There was a park here that we managed to rent  
21 that had a sheet pile shear wall driven and the top of the  
22 wall was again approximately 10 or 12, maybe 13 feet above  
23 normal river level. This area ran in this direction,  
24 returned back like this and then it dropped off. This was a  
25 high area, our fence around the project run down the side of

1 this side to the edge of the river, to the edge of the shear  
2 wall.

3 Q Mark the river. And mark -- you were saying this  
4 was an access road?

5 A Right. This is our entrance into the job site  
6 through a set of gates, but any way that's the gates.

7 Q Could you put gates and access road. And you've  
8 marked on there a fence, public access road, and marked  
9 river?

10 A I need to mark another set of gates there.

11 Q You've marked river to be the Mississippi River?

12 A Right, this is the Mississippi.

13 Q Can you indicate where north, south, east, and  
14 west?

15 A River flows south.

16 Q Would you indicate where the staging areas are?

17 A The office trailer was near -- the office area was  
18 right about here. We had two office trailers mounted  
19 side-by-side. I didn't allow enough room. There was a  
20 security box parked here, there is highest ground on the  
21 project right in through here and this was the trailer parked  
22 here, and trailer parked here. This roadway went around it  
23 like this roadway.

24 Q That's the road?

25 A That's our construction roadway. We come into the

## PERRY REPORTING SERVICE

1 job site this way. Storage was here and here, and this was  
2 generally kept so we could back concrete trucks to our  
3 barges.

4 Q So it's clear, in red, mark on there which ones on  
5 the storage areas?

6 A I'll do it with a circle.

7 MR. NEED: Would you also mark on there the  
8 location of the Memorial Bridge as well as Bay Bridge?

9 THE WITNESS: Well, it's not to scale, but the  
10 Memorial Bridge is down here and our structure is up here,  
11 Bayview.

12 MR. SPRONG: Maybe we can put the mileage on  
13 there so we can tell how far downstream it is. Do you  
14 recall?

15 THE WITNESS: I have to make a guess, but the  
16 Memorial Bridge was --

17 MR. NEED:: We don't need that.

18 THE WITNESS: It's only maybe a quarter of a  
19 mile if it's that far from here. You're talking about 1500  
20 or 1600 feet. I'm not sure, say 1500 feet.

21 Q (By Mr. Herish) That's between the public access  
22 road and Memorial Bayview Bridge?

23 A And this was approximately same, about 1500 feet  
24 so the bridge that we built give or take.

25 Q And that's an accurate representation of the

1 project site in 1980?

2 A That's as well as I can make it without getting a  
3 scale drawing and start detailing it.

4 Q I'm going to ask the reporter mark this.

5 A I would like to mark storage area right behind our  
6 office.

7 Q The map, as I look at it now, indicates there is a  
8 storage area in the southwest, northwest and eastern portions  
9 of the site?

10 A That's correct.

11 Q With regard to the northwest site, northwest  
12 storage area, what materials were stored?

13 A Generally, they were form materials, wood  
14 materials, steel materials, and materials that were going to  
15 be used directly would be moved to that area maybe set there  
16 for two or three days, might even sit for a week prior to  
17 being placed on the barge, but they would have been moved  
18 from the back of the area to the front near the shear wall,  
19 or moved from this area back into here, or back into this  
20 point.

21 Q When you say this area so the record understands  
22 what you're saying, you're saying moving from the  
23 southwestern storage area to northwestern?

24 A Generally, the area where you try to move directly  
25 forward closer to the shear wall so you don't have to reach

1 so far out with our cranes to pick them up.

2 Q Was there anything else in the northwestern  
3 storage area, any other materials?

4 A Construction, you would find pieces of form, you  
5 would find some steel.

6 Q Were there paints, solvents?

7 A No.

8 Q Fuel oils?

9 A No, not there, not in the northwest.

10 Q With regard to the southwest storage area, what  
11 was contained in that area?

12 A Southwest corner was generally the oils, the fuel  
13 oils, the gasoline, the curing compounds and that's it.

14 Q The paints?

15 A The paints were not stored there, no.

16 Q With regard to the west -- I'm sorry, the eastern  
17 storage area behind the office, what was located there?

18 A Two drums located there, that was the material  
19 that we had purchased to -- originally purchased to cut  
20 epoxies and they were kept there.

21 Q What did those drums contain?

22 A The chemicals right now -- I can pick it up off  
23 this --

24 MR. SPRONG: He's talking methylene chloride  
25 and trichloroethane.

## FERRY REPORTING SERVICE

1 Q (By Mr. Berish) Where were the Metacote and Penn  
2 Seal stored?

3 A Originally, when they come in, they were stored  
4 back in this area, the first delivery.

5 Q And so the record is clear, he is referring to a  
6 pencil mark on the northern wall of the site.

7 A There was a trailer, electrical trailer setting  
8 here and there were stored right in here -- electricians'  
9 trailer, a small electricians' trailer and they were stored  
10 behind it.

11 Q Were there any other locations where those types  
12 of materials were stored?

13 A Not during the course of time I was there.

14 Q Were there any other materials stored along the  
15 site that has not been indicated?

16 A Yes, there were.

17 Q What materials and where were they?

18 A Nuts, bolts, 50-gallon drums that we would use for  
19 trash collection and 50-gallon drums that we would hoist our  
20 material to the deck with empty 50-gallon drums, and we pick  
21 up with a special lifting device and hoist them up to the top  
22 wherever we needed them.

23 Q No other liquid materials?

24 A No, sir.

25 Q Were there any other markers that would help you

1 identify the --

2 A You've asked me about paint about three times.  
3 I've not identified the paint area, which was back up  
4 underneath the new Bayview Bridge up near the railroad tracks  
5 right prior to the railroad tracks. In other words, east of  
6 the railroad tracks where we allowed the Joanna Paint to put  
7 their trailer and they kept their paint materials within that  
8 trailer.

9 Q Could you draw us a second exhibit here with that  
10 bridge and that location?

11 A Like I say, that would have been approximately 500  
12 to 1000 feet from this particular area.

13 Q When you say from this particular area, you mean  
14 from the north wall of the fence?

15 A Yes, generally. You're going upstream. That  
16 would be correct. Here is Bayview Bridge again, prior  
17 contractor had built a portion of the structure and  
18 eventually wound up touching ground here. The ground grade  
19 here sloped behind here and there was a set of railroad  
20 tracks right through here. And that trailer was parked up  
21 here out of the way. There was a little road that came in  
22 here that allowed them to get to the trailer.

23 Q Could you indicate on there by naming the  
24 different roads, the bridge, the railroad tracks?

25 A I forget -- I'm going to call it the river road.



1 The closest road to the river is the one I'm drawing here,  
2 public road.

3 Q And the river is located just beyond that?

4 A Quite a ways from it, it was quite a ways up the  
5 bank. We tried to get on the highest ground that was  
6 available to us with all the equipment as you can imagine.  
7 This would have been the painters' trailer.

8 Q And could you also indicate where those drums were  
9 stored?

10 A Within the trailer.

11 Q And you indicate on there, I think, you stated  
12 where the river is?

13 A Here's the river.

14 Q And I believe you also were indicating what this  
15 structure was here?

16 A Right, this is Bayview Bridge.

17 Q Approximately how high above the water level is  
18 the paint trailer?

19 A I'd be speculating, but I would say approximately  
20 10 feet, 15 feet above normal river level.

21 Q You had talked about a wall in Exhibit A, was  
22 there a similar type of wall located here?

23 A No, just a normal river bank.

24 Q And that's your best recollection of what the site  
25 looked like in 1986?

1           A       Well, I could get into a lot more detail here. I  
2 can tell you that's the way it was.

3           Q       Reasonable representation?

4           A       There was a small sheet pile wall here, that was  
5 approximately 30 inches above river stage, it was used by a  
6 subcontractor prior to us showing up there.

7           Q       I'm going to ask to have this marked as Exhibit B.

8           Q       You indicated with regard to Exhibit B, that the  
9 drums were stored within -- the paint in the paint trailer?

10          A       Correct.

11          Q       Were there any solvents stored in there as well?

12          A       I'm not sure.

13          Q       Do you know how many drums were stored in the  
14 trailer?

15          A       As he was using the paint he would move more in.  
16 My one look into the trailer there was probably five drums in  
17 it to look.

18          Q       Where would he have been moving them in from?

19          A       Trucking them in from I don't know where, and  
20 unloading them into that van.

21          Q       Who was the person in charge of the trailer?

22          A       You would have to go to Joanna and find out who  
23 that foreman was. I may be able to go back into the records.  
24 We don't normally track the foreman's name.

25          Q       Who was the company?

## PERRY REPORTING SERVICE

1 A Joanna had the contract and they subbed their work  
2 out to a Sheffield Painting Company. That needs to be  
3 clarified. I think that's it.

4 Q You can only testify to your recollection.

5 A Yes.

6 MR. WIND: No external storage?

7 THE WITNESS: No. It was too risky with the  
8 river. You got to contain that stuff, no.

9 MR. SPROWE: Off the record.

10 (At this time an off-the-record discussion was had)

11 Q (By Mr. Heron) We were taking a moment to  
12 determine the meaning of external storage. It is apparent  
13 from our discussion that everyone understands that external  
14 storage means outside of the trailer and that the question  
15 was answered appropriately. Were the paint materials ever  
16 brought to the area designated in Exhibit A?

17 A Yes.

18 Q Where were they placed there?

19 A They would be placed on a barge directly.  
20 Directly onto the barge, taken to the area of painting and  
21 raised up by crane to the deck and then painting would  
22 commence at that point.

23 Q Perhaps I'm not clear. When I said were paint  
24 materials ever taken from or taken to the area designated in  
25 Exhibit A --

1 A This is where the barge always landed right here.

2 Q So, you had to move paint material from the paint  
3 trailer to the area designated in Exhibit A and then from  
4 there to a barge? Could you please answer on the record?

5 A Yes, but I've got to tell you during the course of  
6 the job this didn't happen very long. As soon as we were  
7 land bound, the materials were driven to the deck by the  
8 painter in his truck.

9 Q Was there any temporary storage for those paint  
10 materials within the fenced in area designated in Exhibit A?

11 A No.

12 Q They went straight from the painter's truck to the  
13 barge?

14 A Right.

15 Q What about for solvents?

16 A Those were usually carried. I guess I've got to  
17 stop for a second.

18 (At this time a short break was taken)

19 Q (By Mr. Marsh) We're back on the record and Mr.  
20 Tugate is going to go on and explain the mixes of the paint  
21 prior to application.

22 A We felt like the application of paint or allowing  
23 them to mix paint on top of the structure would damage or  
24 screw up the looks of the structure. So we insisted that the  
25 painter mix his paints at his trailer, and carry them. To

## PERRY REPORTING SERVICE

1 mix them in small quantities and only take up what he was  
2 going to use for the day. If he ran out during the day he  
3 got back on the barge or drove off the bridge and mixed some  
4 more and brought it back up. We don't have any storage  
5 facility on the structure. The only time he moved from his  
6 storage area to what you called storage area A --

7 Q Exhibit A southwestern area?

8 A To what you call Exhibit A was during the course  
9 of the job where he had to mount our barge to take the  
10 material out and generally that was carried in five gallons  
11 cans capped.

12 Q When you say he was mixing the paint, what was he  
13 mixing?

14 A He would get the consistency that he wanted by  
15 adding solvents. That was those solvents were in the five  
16 gallon square pails.

17 Q What kind of solvent, do you know?

18 A I don't know.

19 Q And do you know who might know or who would know?

20 A I'm sure the painter.

21 Q Anybody else?

22 A Not likely because there is different solvents,  
23 you can buy so many different solvents that will cut the same  
24 materials, that we wouldn't go into that.

25 Q When you talk solvents you mean organic chemicals?

## PERRY REPORTING SERVICE

1 A Paint thinner.

2 Q Where was the trash and empty containers stored?

3 A Originally, they were -- we always kept one in the  
4 the office area that would take care of anything that was  
5 collected near the office. Another one was kept on the barge  
6 and when we're able to drive -- and that one on the barge was  
7 normally raised to the deck. We have had a situation where  
8 we had one at office, near the office trailer, one on the  
9 barge, and two on the deck, which they would be hoisted off  
10 and put on the barge and taken in for pick up.

11 Q When drums were empty, when the material was used  
12 from the drum, what happened to the drum?

13 A They were placed in the containers and hauled off,  
14 in the trash containers.

15 Q When you say trash containers are you talking  
16 about --

17 A Barge construction type boxes, furnished by BFI up  
18 in that area.

19 Q Were the drums cleaned prior to disposal?

20 A I don't think so.

21 Q Was there a segregation of wastes, trash waste  
22 versus other type of chemical wastes?

23 A Well, no, there was very little waste.

24 MR. NIED: Just as a clarification, in other  
25 words, you had an empty 55 from Concentric, as soon as that

## PERRY REPORTING SERVICE

1 was empty you would simply place it in the dumpster.

2 MR. SPRONG: I don't think the conpressive  
3 ever came in 55 gallon drums.

4 THE WITNESS: That's correct. It never came in  
5 55 gallon drums.

6 MR. NIED: What size?

7 THE WITNESS: Originally, we got them in 15 and  
8 reduced size almost immediately.

9 MR. NIED: Let me rephrase that. Other  
10 products that were delivered in 55 gallon drums, which you  
11 did have your Penn Seal as well as Metacote, right?

12 THE WITNESS: Yes.

13 MR. NIED: When they were empty, they were  
14 simply placed in the dumpster and Browning-Ferris hauled it  
15 off?

16 THE WITNESS: Yes.

17 Q (By Mr. Herch) The conpressive or other materials  
18 that were not in 55 gallon drums?

19 A That usually set itself up like a rock very, very  
20 quickly.

21 Q What about solvents, were they in smaller  
22 containers than 55 gallon drums?

23 A We didn't use solvents.

24 Q I thought -- excuse me, but maybe -- was there  
25 mixing of paints?

1           A       Except for the painter, and I would be speculating  
2 if I told you exactly how they did it. What I seen was the  
3 square five gallon pails that he would take back and forth.  
4 So I'm assuming he had 50 gallon drums or something by his  
5 trailer.

6           Q       You mean a 50 gallon drum of solvents?

7           A       Perhaps. I want to correct myself.

8           Q       Go right ahead?

9           A       He did not have 50 gallon drums worth of solvents.  
10 His solvents were -- the one time I looked in the trailer  
11 were these square tin pails and they were maybe -- when I  
12 looked in the trailer he had 10. So that was the way he was  
13 delivering the solvent.

14          Q       And do you know what happened to those pails when  
15 those were used, did they go into the trash containers and  
16 get hauled away or were they rinsed?

17          A       I believe he took them with him when he left.

18          Q       When were these different staging areas built?

19          A       Immediately upon arriving to the job. What you  
20 call the west staging area --

21          Q       The southwest or northwest?

22          A       This particular stage area right here.

23          Q       You're referring to the southwest staging area?

24          A       That was built, fences up, before we received any  
25 materials.



1 Q And what about the staging area in the northwest  
2 on Exhibit A?

3 A That's the same situation. You've got to remember  
4 this is small area so we fenced it and had it all prepped  
5 prior to receiving any materials, the whole area.

6 Q And that goes for all of the storage areas  
7 including the storage area behind the office?

8 A That's correct.

9 Q And they were used as staging areas throughout the  
10 entire project?

11 A Yes, they were.

12 Q And was there anybody in particular who was in  
13 charge of maintaining the storage areas?

14 A Yes.

15 Q Who would that be?

16 A Let's stop for a minute.

17 (At that time a short break was had)

18 Q (By Mr. Marsh) We're back on the record and we've  
19 just taken a short break to go to the bathroom, get drinks,  
20 and relax a little bit. We're going to go back to the last  
21 question which was who was responsible for maintaining the  
22 storage areas?

23 A That's the reason I wanted to take a break was to  
24 think that over. The area was very small and had to be  
25 continually monitored for location of drums so you can even

## PERRY REPORTING SERVICE

1 get through there. There was ongoing things and usually done  
2 by our labor foreman and/or one of his laborers to make sure  
3 it was contained and materials were contained.

4 Q Who was that?

5 A Labor foreman was Steve somebody.

6 Q Would anything help refresh your recollection?

7 A I'd have to go look at some time sheets.

8 Q He wouldn't be one of the people listed on the  
9 information request answer?

10 MR. CYPRIAN: I don't think so.

11 THE WITNESS: He was not a McCarthy person that  
12 was transferred to Quincy. He was hired up in Quincy from a  
13 Union Hall up there and was one of the workers. And if  
14 you're looking for his name I would have to look at some time  
15 sheets.

16 Q (By Mr. Herli.) Okay. Was there a lock on the  
17 gates?

18 A Yes.

19 Q Was there a guard at the site?

20 A No.

21 Q Were there signs at the site?

22 A Yes.

23 Q What did those signs say?

24 A We had a sign that said CTL entrance, McCarthy  
25 entrance, construction entrance, typical construction sign,

1 keep out, hazard type warning systems, hard hats only, and  
2 the name of the project.

3 Q You had stated earlier on that there was purchase  
4 of some barrels of material, do you know who the supplier  
5 was?

6 A Barrels of materials, what materials?

7 Q The paints, was it D.G. Robbins?

8 A I don't know.

9 Q Does Bob Fisher supply?

10 A He did not handle painters' materials, no.

11 Q What did Bob Fisher supply for McCarthy Brothers  
12 at the site?

13 A He supplied forming materials, nuts, bolts, wall  
14 steel, he supplied -- I think, I believe he supplied --

15 Q Let the record reflect that Mr. Tungate is  
16 reviewing the information request answers supplied by  
17 McCarthy Brothers Company in November of 1989 dated November  
18 29th, 1989.

19 MR. SPRONG: I'd like the record to also show  
20 he's got the request letter, but there was some attachments  
21 to the letter that I don't believe you have, some MSDS sheets  
22 and product data sheets. I don't believe you have copies of  
23 those.

24 THE WITNESS: No, I have nothing but the  
25 letter.

1 MR. SPROW: Which I had that we included  
2 those with the letter.

3 Q (By Mr. Persh) To the Agency?

4 A For some reason I can't find this.

5 Q Are you familiar with Superior Solvents and  
6 Chemical Company?

7 A Superior Chemical, I have to know -- that name  
8 doesn't necessarily ring a bell because Superior handles so  
9 many different chemicals and solvents and so forth.

10 Q When did painting on the Bayview Bridge project  
11 begin, approximately?

12 A It would be approximately in 1985.

13 Q And when did use of -- and I assume when I say  
14 painting that you mean Metacote and Penn Seal?

15 A No, I thought you were talking about the Joanna  
16 Painting Company. That's what I thought you were referring  
17 to.

18 Q I'm sorry. Who was responsible for the Metacote  
19 and Penn Seal?

20 A McCarthy applied that.

21 Q And where was that stored?

22 A That was stored in the same areas that I've  
23 indicated here.

24 Q Looking at Exhibit A, which storage area is that?

25 A We've only indicated one storage age area right

1 now except for the painting materials for the painters. But  
2 in the first Exhibit you've got here that was our storage  
3 area and that's where the Penn Seal was stored and Metacote.

4 Q I guess I'm a little confused. With regard to  
5 Exhibit A, is that southwest?

6 A That would be southwest McCarthy site, yes.

7 Q And approximately how many drums of Penn Seal and  
8 Metacote were stored at any time in that location?

9 A We had two deliveries of this material. We had  
10 one delivery probably in '85, I'm going to say probably. I'm  
11 trying to help you here, which was for the tire legs that was  
12 painted first and then second delivery in '86 for the deck  
13 portion of the slab where we applied it to the slab portions.

14 Q Approximately when in '86?

15 A I really can't tell you. I think I can refer to  
16 this and look it up and probably be able to tell you.

17 Q And by that you mean you're referring to the  
18 answer to information request in 1989?

19 A Right. This doesn't tell me the date of purchase  
20 for the second set, but it would have been in '86.

21 Q Mid, early, late?

22 A Mid '86.

23 Q Approximately how many barrels were remaining in  
24 the southwest corner of the fenced in portion on Exhibit A as  
25 is shown by Exhibit A? How many were remaining at the time

1 that there was a flood in the Mississippi River in 1986,  
2 October of 1986?

3 A I don't recall.

4 Q Can you give an estimate?

5 A I can give you an estimate of approximately two  
6 Penn Seal and four Metacote.

7 Q That's the total number of drums located in the  
8 southwest corner?

9 A That's not quite true. That's the normal storage  
10 area. When the river is coming up those materials are moved  
11 back. As you come off the sea wall itself and you climb back  
12 towards the trailer the ground picks up in grade. In the '86  
13 high water those drums were moved back to the higher ground,  
14 which we tried to place sometimes outside of the trailer next  
15 to the railroad track area depending on what the water stages  
16 were going to be. Trying to get it up out of the water area.  
17 The highest ground was the trailer. We were never flooded  
18 out at the trailer. Sometimes we had water at one time  
19 approximately a foot over the top of the wall.

20 Q Let's back up a little bit. How many drums of  
21 Penn Seal and Metacote were used for the project  
22 approximately?

23 A I don't know.

24 Q Would it surprise you if it was 300?

25 A Drums, no way, no, sir, that's not possible.

## PERRY REPORTING SERVICE

1 Q Would it be 100?

2 A I would have to start speculating. I don't know  
3 how to answer that question. I could be far off.

4 Q Would it be 300 gallons, would that sound more  
5 reasonable?

6 A Yes, if you're talking -- that would sound more  
7 reasonable 300 to maybe 600 gallons.

8 Q I'm looking at the response dated November 20th,  
9 1986, on page four item number 12, second paragraph indicates  
10 -- I'm sorry, first paragraph indicates approximately 200  
11 gallons of Metacote 50 and 360 gallons of Penn Seal 50 in 50  
12 gallon drums?

13 A That's sounds right. That's very close.

14 Q So approximately four drums of the Metacote and  
15 approximately seven drums of the Penn Seal?

16 A Yes, that sounds approximately correct.

17 Q And how many drums or how many gallons would have  
18 been applied, you indicated there were two portions being?

19 A The decks would have taken approximately -- I'm  
20 trying to be helpful -- the deck work would have taken  
21 approximately two-thirds of the materials. One-third of the  
22 material would have been on tire legs, approximately.

23 Q And you had finished the tire legs in 1986?

24 A They would have been finished, yes. They would  
25 have been finished in 1986, except for the portion above the

1 deck slab, which would have been done at the same time. The  
2 epoxy materials start at 10 foot above the water line and run  
3 up to the bottom of the substructure. And we had coated that  
4 area and then when we applied the epoxy to the sides of the  
5 slab, painted the sides of the slabs. At that time we  
6 carried it up to the rest of the way, which was, I think, 10  
7 or 15 -- I can't be held on this, 10 or 15 feet above the new  
8 roadway slab.

9 Q Were those materials, the Penn Seal and Metacote,  
10 were they ever mixed with anything?

11 A No.

12 Q They were applied direct from the container?

13 A Yes, they were poured into a pan we talked about  
14 with paint roller.

15 Q So they weren't thinned?

16 A No.

17 Q Is it reasonable then to anticipate that about  
18 two-thirds of the materials would have been within that  
19 fenced area in October of 1986?

20 A That's reasonable to assume.

21 Q Were there any -- you mentioned earlier on a  
22 gentleman by the name of Steve who would have been  
23 responsible for the storage areas?

24 A He would direct the foreman and clean it up, yes.

25 Q Did he take inventory of materials at the site?



1 A No.

2 Q Did he take any inventories from time to time?

3 A He was labor foreman really. He would just have  
4 him operating crew to get this area cleaned up etc. etc..

5 Q Did anybody take inventories?

6 A Yes, it would have been Gary Winkle, and Tony  
7 DeCary, and myself occasionally. And that's the extent of it  
8 really.

9 Q Was there a regular time frame to do these  
10 inventories a month?

11 A The inventories would be when you started using  
12 the material saying hey, we've got four drums of material  
13 here and we've used two and we only have a third of this  
14 done. Let's take a look at this. And that's the way that  
15 would have been done.

16 Q Inventory is have we lost anything or have -- I  
17 don't know what you mean.

18 A We buy the materials by quantities that we need  
19 for a project and that's it. Sometimes you buy it twice  
20 which means we don't have storage site, we don't want to buy  
21 all of it at one time. And we buy one half now and need  
22 another half in six months or whatever.

23 Q Was there any particular time frame that  
24 inventories were taken?

25 A I think I've just described that.

1 Q It sounds as if it's haphazard?

2 A I don't think so. That's not my terminology for  
3 it, but it was not haphazard. The materials were ordered and  
4 they were stored on the site. And when we started using the  
5 materials, the calculation for how much materials we need,  
6 and how far a 55 gallon drum would cover. Those are all  
7 calculated. So we buy the materials we needed and store them  
8 on site. The inventories were then conducted as we started  
9 using the materials to see that we were getting the square  
10 foot of coverage that we needed. And if in deed we weren't  
11 getting 200 square feet per gallon it was only getting 100,  
12 we would reinventory and reorder.

13 Q So your other supervisor would come to you and say  
14 we've been using --

15 A We're going to be short or we've got excess  
16 material or something.

17 Q Were these ever written types or inventories? In  
18 other words, would somebody go around and say let's check and  
19 see what you've got?

20 A Yes. They would be, but that piece of paper would  
21 be given to me which I would then order the materials and  
22 then as soon as it came in, as soon as we order the materials  
23 that scrap of paper would go in the garbage. We don't -- you  
24 know, the records of the materials orders and the records of  
25 materials received are certainly kept.

1 Q I will request that you take a look at records  
2 with McCarthy Brothers and to the extent there are any  
3 inventories that they be provided to us. Was there a daily  
4 log book maintained at the site?

5 A Yes, there was.

6 Q And did that also indicate inventories?

7 A No.

8 Q What did the daily log book indicate?

9 A The weather, how many men were working, generally  
10 the river stage, what we were working on, critical areas,  
11 problems during the day such as engineering problems -- this  
12 is a highly engineered job and very difficult to keep field  
13 logs as far as location of steel, is the tower leaning, or  
14 what's going on. A fair construction diary, yes.

15 Q I will also request a copy or the original of the  
16 daily log book particularly with regard from mid-1986 to the  
17 end of 1986 and by mid I mean June, 1986, to end of December  
18 1986. Did the log book also maintain notes of meetings that  
19 you would have had with your supervisors?

20 A I didn't keep the log book.

21 Q Who would have kept the log book?

22 A That was kept by an surveyor.

23 Q Do you have a name?

24 A Yes.

25 Q What would that name be?

1 A Ron Smith.

2 Q And is that a record of McCarthy Brothers or is  
3 that a record of his own?

4 A No, he had good handwriting and a very sharp young  
5 man. I wasn't in the field so he kept a field diary, and  
6 that's the diary.

7 Q And that is not the same as log book or is that  
8 the same?

9 A That's the same.

10 Q Okay. Were there notes kept by anyone of meetings  
11 between you and your supervisors?

12 A No.

13 Q Moving to the fall or winter of 1986, was there a  
14 high water stage, a flood during that time period?

15 A Except for these notes here, there was two areas  
16 of high water during the course of that project that was of  
17 concern. And one of them was in fall of '86. And looking at  
18 the literature here, I'm assuming that this is the one we're  
19 talking about, which is October.

20 Q When you say literature, so the record understands  
21 what you're talking about, you're talking about 1989 November  
22 response by McCarthy Brothers?

23 A And your letters, too.

24 Q Were there other floods?

25 A Yes. We had high water twice that was of any

1 concern.

2 Q Was anything lost during this other flood?

3 A Yes. We lost some 2 x 4's and some plywood in the  
4 first one, that one came unannounced.

5 Q When did that occur?

6 A In the fall of '84 or spring of '85. It was in a  
7 winter between '84 and '85, and the fall or probably in the  
8 spring. Somewhere in that area. After that one we made  
9 contact with the lock and dam below us and communication  
10 system and asked them to please advise us. And they did  
11 from that point on any time we were having any high water  
12 come we had notice. And from that point, any time we had  
13 water forecast to get into any problems we moved equipment  
14 and materials back from the water edge to an elevation that  
15 should have taken care of it.

16 Q How much notice were you given?

17 A Usually 24 hours, 48 hours. We would get forecast  
18 of river stage was going to be at +10 and we would move  
19 everything back so it's taken care of +10. And get phone  
20 call next morning it was going to be two foot higher, and we  
21 would try to find higher ground. That was the situation from  
22 '84 on -- or spring of '85 on.

23 Q In the flood in 1986, do you recall the month, was  
24 that October of 1986?

25 A I think, it has to be, yes.

1 Q How high did the flood water get in that flood?

2 A I believe they got up over the top of the steel  
3 sheet. I'd like to confirm that, but I'm sure that's the  
4 water we're talking about that got up above the sheet pile  
5 wall up above our higher section that we had.

6 Q Do you have any knowledge as to -- you're saying  
7 first on the sheet pile wall?

8 A It's 10 to 12 feet above normal river level.

9 Q And this flood went above that?

10 A Yes.

11 Q Do you know how high it crested at?

12 A I know along the edge of the wall right now -- I  
13 could recollect it, but right now I know along the edge of the  
14 wall it got up to a foot or foot and a half at the low side  
15 of our wall above the top of it. It actually got up to the  
16 trailer area about say within 15 foot of the trailer area.  
17 So the only thing that you could walk in dry was the trailer  
18 to keep your feet dry.

19 Q I guess that was sitting up on a mounted type  
20 area?

21 A The natural flow of the ground. It wasn't built  
22 that way. That was natural.

23 Q With regard to Exhibit B, did the water get -- how  
24 high did the water get?

25 A Up to the edge of the railroad tracks.

1 Q And the railroad tracks are just west of where the  
2 paint trailer is?

3 A Yes. I believe there's a little swale on the east  
4 side of the railroad tracks, a little dip, and I believe it  
5 had maybe six or eight inches of water in that.

6 Q Were there any other construction projects along  
7 the river in the area that you know of?

8 A When we started Jones was putting up the  
9 superstructure. And one of the reasons we couldn't get into  
10 this area then we would preferred to have, which is right  
11 underneath the construction site, they had all their  
12 equipment there. And they used that area up through October  
13 of '86. That gives me a chance to clarify something that I  
14 wanted to tell you. Right at the end of October, Jones moved  
15 out and allowed us to start using the lower area. This is  
16 the storage site up until about the end of October or first  
17 of November of '86, and then at that point we were able to  
18 use this area. If you put this together, the area between  
19 here and the structure including 60 feet on the other side.

20 Q So the transcript -- when you say here the  
21 transcript doesn't mean anything.

22 A From the edge of the Exhibit A.

23 Q Look at Exhibit A, the northern fence going north  
24 to the Bayview bridge structure itself?

25 A And 60 feet beyond was available to McCarthy.

1 Q And did McCarthy utilize that area up to the river  
2 edge?

3 A Yes, we did.

4 Q What did you utilize it for?

5 A We stored as much materials on the barge at that  
6 point as we started landing our barge and moving form  
7 materials in and out. And occasionally we started using it  
8 pretty heavy, the storage facility. However, this was all  
9 metal, steel forms and etc. and because this was still the  
10 original storage area, when I left in December still anything  
11 left to use -- it was near the end of the job. It went onto  
12 '67, but the major structure was done. There is no sense in  
13 moving anything down there. Most of the stuff was left here  
14 and picked up and used as needed. But I wanted to clarify  
15 that. This is the way it was through October and then  
16 starting at the end of October up through the end of the  
17 project we did have this area.

18 Q So it was slightly before the flood stage when you  
19 moved into this area?

20 A Slightly after, probably three weeks after.

21 Q Was Jones in there during the flood stage?

22 A Yes.

23 Q Do you know what materials they would have had  
24 there?

25 A Well, they pretty well moved out. And what they



1 had in there was some piling and garbage, heavy steel forms  
2 and anchors and just junk. They had enough scattered around  
3 so we couldn't use the area, but that's about the extent of  
4 it.

5 Q At what point in the bridge construction did this  
6 October 1906 flood occur?

7 A We would have been -- approximately again, had not  
8 made our shore connections yet. One side of the structure,  
9 the tower in the river on the Missouri side would have been  
10 completed, structure steel framing would have commenced. It  
11 would have been almost complete which would have been 440  
12 feet across side of the tower would have been the section and  
13 started erection tower and the balance of the work.

14 Q This fenced area in Exhibit A, were there locks on  
15 the gate?

16 A Yes.

17 Q Who had keys to those locks?

18 A Approximately six people.

19 Q Who would they be?

20 A They would have been the supervisors, myself, and  
21 the labor foreman. During the course of that construction  
22 site we were working many hours a day and the keys got  
23 distributed by people sometimes who would make it in the next  
24 day. So we had six keys out. We might have had 10 keys out  
25 during the course of that job. We changed locks three times

## PERRY REPORTING SERVICE

1 because we thought we put out too many keys and changed locks  
2 and cut down and increased again. That's typical  
3 construction.

4 Q Any materials lost or stolen that you know?

5 A We had a break-in where someone stole radios out  
6 of the office.

7 Q When did that occur?

8 A This was about the '86 area.

9 Q Early, later?

10 A I don't want to give you the date because I'm not  
11 positive. But we did have a break-in. They stole about four  
12 radios.

13 Q That's a lots of radios?

14 A \$1100 a piece.

15 Q Any other incident like that?

16 A When we first started the project we had a  
17 break-in and vandalism without any sign of materials  
18 disappearing.

19 Q Did you take inventories after each of those  
20 break-ins?

21 A Yes. The first one we thought was probably kids or  
22 something. The second one was definitely a major operation.  
23 But they were after mostly -- the biggest things they got was  
24 the radio and a couple power saws and that type of thing.

25 Q Turning back to the flood in 1986, was it raining

1 at the site during that time period or was it --

2 A Well, we had rains, but we received the notice.

3 Really the rivers upstream from us were packing a real  
4 whorlup. We also had some rains, but it was upriver.

5 Q How much notice did you have?

6 A I think on this particular one we were watching  
7 the river come up, the South Rock was informing us of rises  
8 of eight foot and then next day it was 10 foot and next day  
9 11 foot, so they keep raising the forecast upward as it went,  
10 and we kept moving our materials back up higher and higher  
11 and higher.

12 Q Did you take inventories of the materials prior to  
13 the flood?

14 A No, sir.

15 Q Was there inventories of materials taken after the  
16 flood?

17 A No, sir.

18 Q Did you or anybody else that you know of notice  
19 that there were materials missing after the flood?

20 A Okay. We moved all our materials up to a high  
21 level. We even swung some materials across on the railroad  
22 property to get it up high. The day that the water is at its  
23 highest point one of the laborers sweeping out the trailer  
24 came in and said I think we lost two drums. It was a little  
25 upsetting to me because they weren't supposed to be down

1 there at the low level, which is on this corner here. He  
2 told me, I think we lost two drums and I said where. And he  
3 waved in this direction somewhere in this corner.

4 Q This corner being the northwest corner?

5 A Yes, of Exhibit A. And he motioned that he  
6 thought we lost two drums in that area. We started  
7 immediately --

8 Q Did he have an indication as to what those drums  
9 were?

10 A He thought they were Penn Seal and Metacote or two  
11 Penn Seals or two Metacotes. It was apparently Metacote or  
12 Penn Seal. I wasn't aware of it. I thought we moved all the  
13 material out of there. We had been doing it the night  
14 before and there wasn't supposed to be anything left down  
15 there. His comments started us looking. We sent safety  
16 boats way downstream trying to find out to see if they could  
17 find anything. Secondly, I had my doubts because the water,  
18 I could see some steel members sticking up through the water  
19 at that time and it looking like the water was maybe a foot  
20 to 18 inches deep, and I had my doubts because those drums  
21 were either empty to float away in my opinion. And if they  
22 were full they would still be sitting there. We were out of  
23 the channel and whatever wasn't moving that fast. But any  
24 way we went off to investigate to find out if it was true or  
25 not. I guess, you know, we were looking for some empty

1 drums. I think they were empty drums and that's the reason  
2 -- I won't go into all that. I'll let you ask your  
3 questions. Go ahead.

4 Q What day of the week did the flood occur?

5 A I don't know. I'd have to go back and look. See  
6 the flood occurred over a period of one day. The flood  
7 wasn't day one, day two, three, day four. You're talking  
8 about over a weeks period or two weeks period by the time it  
9 got up and down. And as I mentioned to you, we kept getting  
10 calls from the lock and dam that it's going to come up  
11 additional two feet more than now. We were at flood stage for  
12 quite a while.

13 Q When did it crest, do you know?

14 A I don't.

15 Q When did your crew get back on the site and  
16 recognize there was material missing?

17 A We never quit working. We were working off the  
18 river on barges, so we never quit working. It was the day of  
19 the high water. I can tell you that because I came in that  
20 morning and I remember that I had to walk tippy toe to get  
21 into the office. It was pretty -- you could see it was  
22 highest water we had. That was the morning that the laborer  
23 called my attention to the fact that he thought there were  
24 two drums missing.

25 Q There was water right around the office itself?

## PERRY REPORTING SERVICE

1           A       It was right around the office. We were up out of  
2 the water, but it was around the office. We had ground -- we  
3 were not flooded, you could walk in.

4           Q       Would that have been a Friday that it had crested?  
5 Do you work on Saturdays?

6           A       Yes, up there we did.

7           Q       Did you work on Sundays?

8           A       I did.

9           Q       Anybody else? Was there anybody else on site?

10          A       Very few.

11          Q       Do you recall that Sunday --

12          A       No.

13          Q       -- going out to the site?

14          A       No, too many years ago.

15          Q       When was the last inventory of materials taken  
16 prior to the flood?

17          A       The inventories of materials would have been  
18 what's inside the trailers safety wise, tool belts, that type  
19 of thing. That would probably be -- we run one of those  
20 every six months, roughly every six months. Inventories of  
21 materials on the job site are not done until we need them.  
22 If we see we're running short then we review our problems. We  
23 don't lose materials to the water because we move the stuff  
24 up and out. Our concerns on something like that are like  
25 nil.

## PERRY REPORTING SERVICE

1 Q When you move the materials out from the lower  
2 western portion of the fenced in area under Exhibit A, where  
3 were they moved to? Were they moved to the western portion  
4 or beyond the fence?

5 A This is little lower than the existing roadway.  
6 The forecast called for the water to come up and over the top  
7 or shear wall about six inches, we moved it back onto the  
8 roadway. Then the forecast was for it to come up higher and  
9 get just about where she crested, or as I remember where it  
10 was. And at that time those materials were set -- either set  
11 on the highest part of the ground directly behind the area or  
12 swung over to the other side of the railroad tracks.

13 Q You had one person you said indicated that there  
14 might have been two drums that were missing?

15 A Yes.

16 Q Did anybody else indicate that there were others  
17 materials missing?

18 A No.

19 Q No pilings, no wood?

20 A No.

21 Q No pails, nothing?

22 A No.

23 Q No machines, no equipment?

24 A No. I remember the incident in particular because  
25 we made such an effort the night before to move everything.

## PERRY REPORTING SERVICE

1 And I was upset about the fact, and then when I seen the area  
2 that was flooded I had my suspicions. Either they had been  
3 moved and he missed it or second they were empty and floated  
4 off empty. He still did the search up and down the river  
5 trying to find them, but I had a heck of the time that they  
6 were even there or either moved before he seen them, or more  
7 than likely empty. That was my decision. He said the drums  
8 were missing and that was where my opinion was.

9 Q He talked a little bit earlier about methylene  
10 chloride and trichloroethane, and you indicated they were  
11 located behind the office. You also indicated they were not  
12 used for the job although they were purchased at the time  
13 with the intent to use them for the site?

14 A That's correct.

15 Q When was the last time that you saw those drums  
16 behind the office, or that you knew that the drums were  
17 there?

18 A Probably December -- you're asking me -- it would  
19 have been in December. They were very close to the office.

20 Q Of what year?

21 A '86 or '87, that's when I left they were still  
22 there in '87.

23 Q Both drums were still there and they were marked?

24 A I will tell you I'm positive of the one drum. The  
25 second drum I'm hazy on because I have trouble recalling that



## PERRY REPORTING SERVICE

1 drum from day one. But the second one I recall and I recall  
2 it being there. He read the warning label on the thing. And  
3 it was a combination, one is cleaning tools to spray epoxy  
4 was very high cost laborwise, and the second one was we were  
5 reconsidering the use of spraying. And when the materials  
6 came in and I seen the warning label on it, so we put the  
7 material behind the trailer next to the security box on high  
8 ground and didn't intend to use it.

9 Q Did you sell it for resale to somebody else?

10 A No, the plan was when I left was to ship it back  
11 to our yard here in St. Louis that has the connections and  
12 ability to handle those type of materials.

13 Q Did that occur?

14 A I really don't know. I have no knowledge of that.  
15 I left in '87 and went to Florida.

16 Q Could there have been more than two drums that  
17 were lost during that flood, four drums?

18 A Extremely doubtful.

19 MR. SPRONG: I'm going to object. We haven't  
20 established that two drums were lost yet.

21 MR. BERSH: He stated that he had somebody --

22 MR. SPRONG: You can answer if you want to.  
23 I'm going to object to that it hasn't been established that  
24 two drums were lost let alone four.

25 THE WITNESS: Yes, I'll stick my head out and

## PERRY REPORTING SERVICE

1 state it that way. We're not sure two drums were lost. And  
2 as far as any other drums being lost, I think anything is  
3 possible. I think it's extremely unlikely.

4 Q (By Mr. Hersh) With regard to -- who was the  
5 person who stated that he thought two drums were missing?

6 A Laborer that was sweeping up the trailer.

7 Q You don't recall the name?

8 A No, no, I don't. But it got to be the  
9 conversation piece around the job site for a while because I  
10 was raising some hell and it did get a little attention.

11 Q In fact, isn't it true that additional drums of  
12 material were ordered after the flood? When I say material,  
13 I'm talking about Penn Seal and Metacote?

14 A That's not -- okay, I left in December, if other  
15 materials were ordered after that, I wouldn't be surprised as  
16 far as Penn Seal and Metacote. Sometime in February or not  
17 February, but sometime in '86, around that length of time we  
18 started checking our quantities of material covered versus  
19 spec. You're supposed to get so many square feet per gallon  
20 and we were running low. And we started checking quantities  
21 and we were not getting production. One of the reasons is we  
22 were rolling it on instead of spraying it on. You really  
23 should talk to someone else about that. I don't have  
24 firsthand knowledge. I understand that something else was  
25 bought, but I don't know.

## PERRY REPORTING SERVICE

1 Q Were there any other spills, leaks of any other  
2 materials that may have gone into the river or anywhere else  
3 for that matter during the flood period?

4 A During the flood period, I just don't believe it  
5 was possible. We took some real extreme care at that time to  
6 see that it didn't happen. I don't think so. I'll tell you  
7 that anything is possible, but it's unlikely.

8 Q Was a report made with regard to these two drums  
9 that were reported to be lost?

10 A That's a long time ago. I wouldn't tell you that  
11 it wasn't or that it was.

12 Q I will refer you to page five paragraph 13, first  
13 paragraph of the McCarthy response if that refreshes your  
14 recollection?

15 A Okay. Someone apparently wrote that down.

16 Q Does that refresh your recollection that any  
17 records were maintained regarding those drums?

18 A Apparently, somebody's got a record to research  
19 the file to give you the answer that you have. It shows two  
20 closed barrels of Penn Seal, but I was there during that  
21 episode. And I'm telling you the fact are that we're not  
22 sure we lost them. I think it's extremely doubtful that we  
23 did, okay. And if we did, they were probably empty drums or  
24 close to being empty, that was my opinion when my attention  
25 was called to the problem.

## PERRY REPORTING SERVICE

1 Q What is your understanding of the meaning of  
2 "closed barrels"?

3 A That they are capped. In other words, the plugs  
4 have been put back in and seal has been reaffirmed. It may  
5 not be absolutely foolproof seal, but they are replugged or  
6 capped, or type of barrel that has a top on them they get  
7 recrimped.

8 Q Do you do that with regard to empty barrels or  
9 with regard to barrels that contain materials?

10 A We always do that with barrels that contain  
11 material. Barrels that are empty should be, but I don't know  
12 that that's always done.

13 Q Could you describe the barrels please?

14 A Which barrels?

15 Q For the Metacote and Penn Seal?

16 A They are gray drums. I can't remember the  
17 Metacote. One was gray and I believe one was black. But  
18 that -- again, I'm sure one was gray.

19 Q Were they metal?

20 A Steel, metal.

21 Q Did they have distinguishing factors in terms of  
22 the way it was constructed?

23 A No.

24 Q Did it have an unusual number of bungs?

25 A I can't answer that. I never noticed any

## PERRY REPORTING SERVICE

1 difference in the barrels, but I don't want to tell you that  
2 it didn't have.

3 Q Do you recall where the bung was for the drum?

4 A No.

5 Q Do you recall the size of the drums, were they 30  
6 gallon, or 55 gallon, or some other size?

7 A I believe they were 55 gallon, but that has to be  
8 confirmed. I'm just going to tell you I believe so.

9 Q Were they stored in a rack or were they loose, or  
10 on pallets?

11 A Stored upright, not on a pallet.

12 Q On the ground?

13 A On the ground, or on the concrete, or on 4 x 4's.  
14 Generally, not on the ground.

15 Q Did you have any barrels that were stored in a  
16 rack?

17 A Yes.

18 Q Which ones were those?

19 A Those were the gas drums, the oil drums, fuel oil  
20 drums, and anything that needed to be disbursed that way were  
21 stored in racks.

22 Q Would that include the two drums of solvents  
23 located behind the trailer?

24 A No, they were standing upright.

25 Q Would that include drums that were located in the

1 paint trailer?

2 A The drums that I've seen in the paint trailer, I  
3 looked in it once, they were sitting directly on the floor of  
4 the trailer.

5 Q There is a reference in the response by McCarthy  
6 Brothers that there is a record of some record regarding the  
7 two closed barrels. I'm requesting to see what those records  
8 are.

9 MR. SPRONG: Is this 13 again.

10 MR. HERSH: Paragraph 13.

11 MR. SPRONG: I think that might be -- I think  
12 I can clarify this a little bit. It talks about in number  
13 two on page two of the response what has been looked to to  
14 prepare the answers and one of the things are the job site  
15 daily logs and job site invoices.

16 MR. HERSH: What is referred to by MSDS.

17 MR. SPRONG: Manufacturer safety data sheets.  
18 I believe when the term is used in 13, that that encompasses  
19 -- that's sort of an all-encompassing term that means by  
20 going back through this daily log. I will have McCarthy look  
21 into that and see if they actually have records, but I  
22 believe that's what it's referring to.

23 MR. HERSH: To the extent it's beyond the daily  
24 logs that I've requested then --

25 MR. SPRONG: You would be talking about some

1 sort of diary or inventory?

2 MR. HERSH: Inventory, diary, computer record,  
3 notes, telephone conversations, meeting conversations,  
4 whatever records there may be without limitation to what the  
5 term record means, which would refer to the two drums.

6 MR. SPRONG: Okay.

7 Q (By Mr. Hersh) Moving back to the flood situation  
8 and two drums, you started to indicate that there was an  
9 effort to look for those drums?

10 A Yes.

11 Q What actually was done?

12 A We sent a safety boat -- from the indication that  
13 I could get from the laborer was that they would have been at  
14 this corner of the site as we already discussed.

15 Q The northwest corner?

16 A Right. The water was not deep enough that if they  
17 had fallen over that you could have seen them. I mean you  
18 would have seen them if they were laying on their sides. So  
19 we sent a safety boat, first of all, if they did float off  
20 whether they are empty we sent a safety boat down river. He  
21 was gone for an hour and a half trying to find some  
22 indication that the drum was lost, trying to find the drum.  
23 There was really not much we could do after that.

24 Q You were saying that you could see that it was  
25 just a few feet deep at the time?

## PERRY REPORTING SERVICE

1 A Right.

2 Q This is after the flood had crested?

3 A Yes, or at the crest or right at the crest.

4 Q How high is the grade between the northwest  
5 storage area site and the trailer, 10 feet, 15 feet?

6 A Oh, no. Maybe 18 inches. The difference in the  
7 elevation at this corner to the trailer and this corner to  
8 the trailer is about the same difference. It's about 18  
9 inches higher than the steel pile wall. That's the reason my  
10 comment was that it couldn't have been more than 18 inches or  
11 perhaps even two feet of water at that point.

12 Q If there's no objection I'm going to ask Wally to  
13 ask a few technical questions.

14 MR. SPROW: No objection.

15 QUESTIONS BY MR. NIED:

16 Q You've just stated that now you believe you were  
17 there for the crest of the flood which you previously you  
18 didn't know when it occurred?

19 A I don't know when it occurred, but during that  
20 period of time I was working seven days a week.

21 Q But not 24 hours a day?

22 A Not 24 hours a day.

23 Q The second technical question, you were also able  
24 to at the peak crest also observe the current?

25 A Yes.



## PERRY REPORTING SERVICE

1 Q And you made it sound like a subjective decision  
2 that based on that crest elevation as well as current it  
3 could not have moved a full drum?

4 A I didn't say that.

5 Q Well, that's not directly but indirectly.

6 A It was my decision or my thinking at that time it  
7 was very unlikely that that depth of water and the flow of  
8 water that I seen at that particular area would have pushed  
9 off a full drum, 340 pounds or something like that, of  
10 material just taken it with it. We still had steel beams  
11 that are standing there sticking up out of the water that are  
12 chunks, chunks were stacked up. It was my thought, and it  
13 was merely my thought, that it was very unlikely that those  
14 drums were full-sized drums would have moved.

15 Q Okay. But now clearly you're not stating that  
16 you're a hundred percent sure that you did observe the peak  
17 maximum crest in that area?

18 A It would be very easy to call them and check the  
19 elevation and where we were at. But when you work the hours  
20 that I did and you work from seven to eight o'clock every  
21 night and back at the next morning at six, you're not --

22 Q Theoretically it could have crested that night?

23 A Yes, but unlikely.

24 Q And you're referring to steel which is entirely  
25 different situation as far as resistance to current than a

1 round 55 gallon drum versus a piece of I-beam?

2 A That's the reason I had to tell you it's extremely  
3 unlikely and not rule out the possibility. Had I felt like  
4 it was absolutely impossible I wouldn't have sent a safety  
5 man up and down the river.

6 Q All these lead into my major question and that is  
7 is in deed you have a drum, in this case, of a specific  
8 gravity of approximately 1.5 in water and that indeed was  
9 washed into the river, there is, in my opinion, a very low  
10 probability of being successful in locating that on the  
11 surface. Do you agree with that, if you have a higher  
12 specific gravity inside a steel drum which is heavier than  
13 water?

14 A Yes.

15 Q And that indeed would not float?

16 A Correct.

17 Q Well, as I look at 13 in writing, you stated --  
18 not you -- but your firm stated yes, full drums were lost?

19 A It said presumably.

20 Q I noticed that. I guess what I'm asking -- the  
21 last question I'm leading up to, do you believe that that  
22 would be an adequate search for a product that does not float  
23 on water?

24 A Okay. You're asking for some opinions here. Do  
25 you want this on the record or do you want to talk outloud.

1 Q You just gave your opinion on the crest, whether  
2 or not you were there. We know all your opinions.

3 A That's part of my responsibility is in the  
4 position I'm in is to make decisions and to make what we hope  
5 are good decisions. I thought it was extremely unlikely.  
6 Those barrels were supposed to be moved the night before.  
7 The particular fact that a laborer tells me that two drums  
8 that may have been there at a certain time last night hadn't  
9 been moved after he last looked. The probability in my mind  
10 that those drums had been pushed over full with the water  
11 flow we had was almost nonexistent in my mind. The only way  
12 that I felt it could have happened would be if they had been  
13 partially empty or empty and it floated downstream did exist.  
14 My response then was to send a man looking for floating drums  
15 downstream. Because, in my opinion, it really didn't happen.  
16 I thought we had either empty drums going downstream or no  
17 drums lost.

18 QUESTIONS BY MR. HERSH:

19 Q In looking at our records, the records indicate  
20 that the river crested at 25.3 feet at the Quincy filter  
21 plant on October 24th of 1986. You indicated that the sheet  
22 wall was approximately 10 feet to 12 feet above, so that  
23 means that would have been additional 10 to 15 feet above the  
24 sheet wall that the water would have risen at crest?

25 A 10 or 15 feet above the sheet pile wall our

1 trailer would have been under water.

2 Q Were you there 24 hours a day or were you there at  
3 the crest?

4 A If it was that much above the sheet pile wall, the  
5 whole trailer would have been under water.

6 Q Was the trailer standing up on blocks?

7 A The wheels were blocked off the ground about an  
8 inch.

9 Q And how high is the door, how many steps up?

10 A Three feet from the ground to the floor of the  
11 trailer.

12 Q Were there any water marks on the trailer?

13 A Never.

14 Q Isn't it true that more than just a laborer, but  
15 in fact some of your supervisors had indicated to you that  
16 not just two barrels, but six barrels were missing?

17 A No, that's not true.

18 Q Isn't it true that two of those barrels that were  
19 indicated as missing immediately after the flood were the 111  
20 trichloroethane and the methylene chloride?

21 MR. SPRONG: I'll object. He said one person  
22 told him maybe two barrels were missing. He denied the  
23 allegations that six barrels were missing.

24 MR. HERSH: Your objection is noted.

25 MR. SPRONG: And he also answered about the

1 trichloroethane and methylene chloride.

2 THE WITNESS: No, sir. It's not possible they  
3 were washed out, no.

4 Q (By Mr. Heron) Did you inform anyone of the  
5 missing barrels, did you or anybody on the staff?

6 A It became a conversation piece in our trailer, as  
7 I mentioned earlier. I'm sure that everybody that had any  
8 supervisory capacity whatever heard about that that day. So,  
9 yes, I would say that everybody that was walking in that  
10 office that morning would have heard about that.

11 Q Did you contact or did anybody from your staff  
12 contact the United States Coast Guard and indicate that  
13 materials were missing from the site?

14 A No.

15 Q Did anybody indicate to the State of Illinois that  
16 materials were missing from the site?

17 A They heard the same conversation about the drums  
18 as anybody else that would have walked into the office that  
19 morning.

20 Q And when you say they, who are you referring to  
21 specifically?

22 A I'm referring to the inspectors on site at the  
23 Quincy Bayview Bridge.

24 Q Would that have been with regard to Illinois  
25 Department of Transportation or Illinois EPA or --

1 A Illinois Department of Transportation.

2 Q Who was responsible for disposal of waste  
3 materials from the site?

4 A McCarthy Brothers.

5 Q Any particular persons?

6 A No.

7 Q Who was responsible for ordering materials for the  
8 site?

9 A Myself and some of the supervisors that we direct  
10 to go ahead and take care of the problem or whatever we  
11 needed.

12 Q Who specifically?

13 A Generally, it was Chuck Dieders. I very seldom  
14 ordered anything directly myself. Gary Winkle ordered some  
15 materials. Another man there by the name of Mike McKay was  
16 another one that would order materials, but up until I left  
17 everything was bounced off of me.

18 Q Were there separate log books kept by those  
19 people?

20 A Personal diaries, I don't know if they kept  
21 personal diaries or not.

22 Q Log books for the company?

23 A No.

24 Q Records of other sorts for the company?

25 A By who?

1 Q By each of those people ordering materials?

2 A What sort of records? When they place an order,  
3 generally, there will be some names. Perhaps if we ordered  
4 some after I left if somebody ordered some more Metacote or  
5 Penn Seal or something like that, generally with the purchase  
6 you would either write a letter stating we need blank, blank,  
7 blank and a name will be underneath it so you know who is  
8 going want.

9 Q Were there any claims for insurance funds for  
10 materials lost during the flood?

11 A No. Let me change that. I don't think so.

12 Q In billing the Illinois Department of  
13 Transportation for contract costs, did you bill them once at  
14 the end all on-going cost items, how was that done?

15 A Monthly items.

16 Q And you would indicate specifics as to hourly  
17 rate, how many people were working, materials purchased, that  
18 sort of thing?

19 A It's direct contract, hard bid contract. So the  
20 values of the materials that went into the structure were  
21 already established under bid items. So you would have  
22 pre-cast slabs, concrete towers all broke out as separate  
23 numbers. And both McCarthy and IDOT would keep of the  
24 material and what's a pay item. And they had an agreement at  
25 the end of the month. We never quite agreed, but IDOT

1 usually won the battle.

2 Q Did that contract anticipate specific number of  
3 gallons of material such as Metacote and Penn Seal?

4 A I would have to look at it.

5 Q Each time you ordered materials you would indicate  
6 we are ordering a 55 gallon drum of Penn Seal or etc.?

7 A Not to them, no. The contract to them would have  
8 be epoxy cover slab. It may say so many square feet at a  
9 unit price without any other statements. And they wouldn't  
10 care if you used 50 drums they would be more concerned how  
11 many square feet would that cover.

12 Q And from McCarthy's perspective, the square  
13 footage coverage, whichever cost you placed on that was  
14 reimbursed by Illinois Department of Transportation?

15 A We knew how many square feet before we ever  
16 started to work. They were only going to pay us for what we  
17 did, and that unit was established before we ever showed up  
18 as far as physically on the job site.

19 Q Were there ever move tickets or invoices for waste  
20 hauled from the site?

21 A Yes from BFI, There would be tickets from them.

22 Q Were there any move tickets or invoices for waste  
23 for hazardous waste materials removed from the site?

24 A No, sir. I don't want to say that. I'm sorry.  
25 What I have to tell you I was not there at the end of the



1 project. In the length of time that I was there, no  
2 hazardous materials were moved off the site. The one drum  
3 and possibly the second drum that we were concerned about was  
4 kept stored alongside of the trailer were my two major  
5 concerns. That had to go back when we moved out.

6 Q When the Illinois Department of Transportation was  
7 notified that materials may have been lost from the site, was  
8 there anybody in particular that was notified?

9 A The resident engineer was Lou Niesar and he had  
10 several -- four or five people on his staff. Lou was in and  
11 out, there most of the time. I'm sure he knows about the  
12 incident. Whether he was there at the exact time that I went  
13 out and started looking for drums, I'm not sure. He was  
14 certainly --

15 Q Did you specifically inform him or did one of your  
16 immediate supervisors immediately inform him of the potential  
17 for missing drums?

18 A Specifically, I know they know of it. Not a  
19 meeting as such.

20 Q Did anybody contact the National Response Center  
21 and indicate that there might be drums of missing materials  
22 in the Mississippi?

23 A No.

24 Q Was there anybody else informed?

25 A No one was notified.

1 Q Was there any written notification sent to anyone?

2 A No.

3 Q You indicated that there was a boat looking for  
4 drum?

5 A Yes.

6 Q Was there any other method utilized to try to find  
7 those drums?

8 A No.

9 Q Were any drums reported back to you as being found  
10 that they thought might belong to you?

11 A No.

12 Q Are there any documents that would refresh your  
13 recollection with regard to the number of drums that may be  
14 missing, that may have been missing, who it may have been  
15 reported to, or any of the other issues that I've addressed  
16 today?

17 A First of all, there was only two drums in  
18 question. There was not six drums in question. I have never  
19 heard that number before up until today. The second, you  
20 have my reasoning, which I doubt extremely that they even  
21 existed, that it happened at all. There was no reports made  
22 to anyone because personally I didn't think it ever happened.  
23 We did search the river. We thought we had that obligation  
24 to go down and take a look and made sure that we at least  
25 done that much. We doubted extremely that any barrels had

1 been lost.

2 Q When you say we who are you referring to?

3 A He, Nick Tungate, project manager.

4 Q Did anybody else share that position?

5 A I made the final decision on that job.

6 Q Did any of your other supervisors indicate to you  
7 that they thought drums did contain materials?

8 A None.

9 Q Did any other workers, laborers indicate they  
10 thought the drums did contain materials?

11 A That they did contain, that they were full.

12 Q That they were full or that they were not empty,  
13 that they had materials in them?

14 A No.

15 Q No one indicated to you that the drums did have  
16 materials in them?

17 A The laborer that first indicated this to me  
18 thought they were full.

19 Q Did anybody else verify that with this laborer?

20 A No.

21 Q And you don't recall the name or another way of  
22 identifying this laborer?

23 A I'm sure I can get his name if I need to get his  
24 name.

25 Q I would appreciate being informed of his name.

1 What was his specific duties at the site, this laborer?

2 A The first person I'm going to give you will be the  
3 labor steward. And his responsibility, of course, normal  
4 labor duties. We had him sweep the office out every morning.  
5 He didn't do it every day. So, I'm not positive -- more  
6 likely it would be this particular person than anyone else.  
7 So we will give you his name and hopefully that will be the  
8 proper person. We had quite a few laborers on the job, but  
9 this was a person that normally did that.

10 Q Were there any attempts made to verify that drums  
11 were actually missing. In other words, did you look at your  
12 records and say yes, we had four drums that should have been  
13 here, two that have been utilized on the foundation materials  
14 and have since been disposed of so we should have two drums  
15 out there somewhere?

16 A Yes.

17 Q And what was your indication from -- what did you  
18 do, let me first ask that?

19 A The question was to the person that was actually  
20 doing the controlling, the paint work going on up the side of  
21 the towers was how many drums do you think you've used out  
22 there right now. The answer was I don't think -- I think we  
23 used two or three, something like that. He didn't have a  
24 solid handle on it. The review of the amount of drums that  
25 we actually had showed that if it was three then he was right

1 if it was two, then we were missing a drum. It was kind of  
2 like piece it together sort of thing. I couldn't get a solid  
3 answer. Again, I come back and tell you that the square  
4 footage coverage that we were getting led us to a problem  
5 area as far as exactly how much. It actually took more to  
6 cover that deck or those walls than what we anticipated  
7 originally.

8 Q Off the record.

9 (At this time an off-the-record discussion was had)

10 Q Back on the record. We've just taken a short  
11 break to get drinks and refreshments and relax a little bit.  
12 I want to ask just a few more follow-up questions. In  
13 October of 1986, you had described the bridge project  
14 situation as the center portion had been constructed, but the  
15 ends had not yet been connected to the banks, is that right?

16 A That's correct.

17 Q And to get to that portion you would take the  
18 barge out or workers would take the barge out to work on it?

19 A I'd like to clarify something. Very close to  
20 October of '86 we made the landing on Missouri side first,  
21 and then we made landing on the Illinois side following that.  
22 And you're near the time that that happened. I believe it  
23 was in November. I believe this particular time you're  
24 talking about we were very close to being on the Illinois  
25 side and had made the Missouri connection. We were not in a

1 condition to drive out from the Illinois side onto the  
2 structure, I don't believe that was the case at that time.

3 Q When you talk about the bridge landing, that was a  
4 specific structure that you had to build to be able to go  
5 from the landing to the barge?

6 A The bridge landing?

7 Q The barge landing.

8 A The public access ramp was very close. We had a  
9 barge that would accept vehicles. It would accept trucks and  
10 that type of thing. So deliveries that were possible were  
11 put onto barges and hauled into the river and hoisted to the  
12 deck. Our materials were pretty well -- were confined to the  
13 sheet pile wall that we talked about, the one that was 10 or  
14 12 according to your records maybe even 15 feet high,  
15 whatever. At that point we would lead men up, we had ladder  
16 built to get them down to the barge level so they could walk  
17 on the barge and be transported out. And we took concrete  
18 there and anything that the crane was taking out there.

19 Q You had a crane structure within the fence?

20 A The cranes were all mounted on barges in this  
21 area. The cranes were all mounted on barges and would be  
22 pushed into the bank to pick up and with the material barge  
23 and pick up whatever they needed and go back out with their  
24 material barge attached.

25 Q Do the barges, did they tie up to anything when

1 they came in for the material?

2 A 90 percent of the time they were attached directly  
3 to the crane barge. There were spuds -- it's down next to  
4 the sheet pile wall. And the other portion of the time  
5 sometimes we could leave them at the location if we were at  
6 the right spot to tie them off. Most of the time they came  
7 in they were directly tied. Occasionally we would tie them  
8 off to the bank.

9 Q This was somewhere in the Mississippi River itself  
10 but near the sheet wall?

11 A Right. During the hours we weren't working, the  
12 barges would with parked out of the channel and generally  
13 left as close to the work area as they could be left in the  
14 river. We came to the bank to pick up the materials perhaps  
15 we could get a week's worth of work on one materials barge.

16 Q How close to the bank could these material barges  
17 get?

18 A Very, very close. They could get right up against  
19 that sheet pile wall. There were rubber tires there so  
20 separation was just that wide.

21 Q Was that the method that the workers as well as  
22 materials got to the bridge?

23 A Yes.

24 Q And during the flood, when waters were going over  
25 that sheet wall, that sheet pile wall, how did materials and

1 workers get to the bridge?

2 A The materials was a problem. I can't recall  
3 exactly what happened. We must have had a lot of materials  
4 on the work barge to continue through that particular  
5 weather, through that flood cycle. The man power would be  
6 taken to the job -- we would push our small -- we had a very  
7 small transport barge we could push up the public access ramp  
8 until we landed and they would walk on.

9 Q How long before a material barge would have to be  
10 resupplied, would it last a day or two days?

11 A Depending on what it was doing, it would vary.  
12 Generally, it would be a week's worth of work. That would be  
13 if you had to pick a number, that's what you would say as an  
14 average, but it could vary from one day to two weeks, but  
15 generally you would average about a week between trips to the  
16 bank with the barge.

17 Q Would there be any records as to when the barge  
18 was resupplied during the flood time period?

19 A I don't think so, not really.

20 Q Would that be in the log?

21 A Not likely. The log was mostly concerned with  
22 construction activity. It doesn't tell you things like  
23 building section B on tower leg C. Setting forms at section  
24 such and such, painting Hictacote or painting Penn Seal, or  
25 putting epoxies on, or gluing panels together. Those types



1 of things will be on the log and our problems. Problems that  
2 cropped up that particular day if we had a structural  
3 problems or engineering problem, if it affected the work it  
4 would be in there.

5 Q So if there was some problem trying to get the  
6 barge in to get some materials that would be indicated in the  
7 log?

8 A Not unless it actually stopped the work activity,  
9 not likely. You might get a note in there that says problem  
10 with landing barge, but that would be an unlikely situation.

11 Q What is the name of the tug or barge company?

12 A We used our own and we got it from St. Louis Boat  
13 -- you need to confirm -- St. Louis -- we got it out here in  
14 St. Louis. St. Louis something or another.

15 Q So it was purchased or leased?

16 A We leased it.

17 Q Who was the captain for the boat?

18 A A guy by the name of Frank Garriga.

19 Q And do you know where Mr. Garriga can be located?

20 A Last I heard of him, he was still in St. Louis not  
21 working for us any longer. He's a top flight boat captain or  
22 crane operator out of St. Louis. And if he's still here he  
23 would be easily found.

24 Q Do you have any knowledge as to where the water  
25 intake pipe is for the city of Quincy?

1           A       I could tell you within a hundred feet, but I have  
2 a pretty good idea.

3           Q       Would you with this red pen, would it fit onto  
4 Exhibit A?

5           A       Perhaps. I could be off a couple hundred feet,  
6 but making a stab in the dark. It was out in the water  
7 probably 300 feet from the bank and downstream from the  
8 public access area. I'm going say about 300 feet, in that  
9 area. Please don't pin me to the wall on that, but right in  
10 that area.

11          Q       Would you indicate on Exhibit A where you believe  
12 the water intake is?

13          A       That is the river along the bank, I would say  
14 about in here.

15          Q       And write on there water intake city?

16          A       City of Quincy. I think they sample their water  
17 once a day too, don't they?

18          Q       In looking through the information request, did  
19 you have a chance -- I'm sorry strike that -- in the  
20 information request, you were listed as one of the persons  
21 that was consulted in providing the answers, did you have a  
22 chance to look at the answers that were written prior to  
23 being submitted to the US EPA?

24          A       I first seen this yesterday. I received no other  
25 written information or communication.

1 Q Have you seen -- since yesterday have you looked  
2 through this information request answer?

3 A I've read it, yes, I have.

4 Q In reviewing this document, is there anything in  
5 there that you believe is incorrect or otherwise ought to be  
6 clarified?

7 A No. I did not go through -- I was not the person  
8 that went through and gathered the data out of the files and  
9 information. And actually my connection from this since day  
10 one except to answer a few questions has been my first  
11 involvement was when I received a notice to be here. So  
12 you're getting this without any research or any background  
13 from me except for my recall.

14 Q And you stated earlier that Penn Seal was applied  
15 with disposable equipment?

16 A That's true.

17 Q On a daily basis the equipment was disposed of?

18 A Yes.

19 Q In looking through the information request, it  
20 appears as if there were extensive -- the answer provided by  
21 McCarthy Brothers, it look as if there is extensive  
22 documentation with regard to certain items. Particularly  
23 nonhazardous items, the materials that were purchased,  
24 specific knowledge that the empty drums were taken to the  
25 trash dump, specific inventories as to how much when, where

1 etc., and yet in other areas there is a great deal of  
2 uncertainty particularly with the 111 trichloroethane and the  
3 methylene chloride.

4 MR. SPRONG: I'm going to object to the term  
5 uncertainty. Could you clarify that. Which part of it is  
6 uncertain?

7 MR. HERSH: What happened to it.

8 MR. SPRONG: Certainly not the quantity.

9 Q (By Mr. Hersh) What happened to it is the big  
10 question?

11 A I can't answer that question.

12 Q I'm going stop trying to carve my questions. What  
13 happened to these two barrels?

14 A I don't know. I was not there at the time. I  
15 left the job in December, the job went on because of the  
16 winter and grounding of the cables went into late '87, and I  
17 was not there. I am going to tell you what happened up to  
18 the time I left to my best ability, which was the end of  
19 December. I might have been there for the first week in  
20 January. I'm not sure, but it was through December for sure.  
21 And at that time I know that the trichloroethane in  
22 particular that that particular material was five feet from  
23 the office trailer just outside my office window and near the  
24 security box that we had stashed on that site. We put those  
25 over there to keep them high, and the security box to keep it

1 high and dry because of river fluctuations. And that's where  
2 we stored that material. That I know was done through the  
3 time that I left. I can't answer from that point on.

4 Q You indicated that certain materials were taken  
5 back to the McCarthy Brothers site or McCarthy Brothers  
6 Corporation for reuse elsewhere?

7 A Yes, most of our materials do. And I can only  
8 tell you that normally any materials that would be received  
9 that would be like a -- whatever that word is trichloroethane  
10 and the other hazardous materials like that would be disposed  
11 of by our yard who has made arrangements here in St. Louis.  
12 That stuff would be shipped for miles to get back in here  
13 where they have the connections and know how to get rid of  
14 that material.

15 Q Would the practice be to send it as soon as  
16 possible to the yard here in St. Louis?

17 A Not so long as you think there might be a  
18 potential use for it. If you had a clean-up situation, if  
19 you got a problem where you had a clean-up situation you  
20 might be forced into using material like this. That stuff,  
21 yes, it would be a very good idea to ship it out immediately,  
22 but then if you do have a spill, I'm talking about if messing  
23 with your epoxies or spray it on something and wind up having  
24 to clean it up. You're going to have to replace with the  
25 same type of materials. The stuff that will cut epoxies is

1 limited and it's all this type of material that we're talking  
2 about. So as long as that operation was ongoing, the smart  
3 thing would be to keep it on site rather than do it again.

4 Q Is it common practice to maintain receipts between  
5 the yard and a particular site?

6 A Yes.

7 Q For materials that are shipped back and forth?

8 A Yes.

9 Q Are you aware of any receipts or any document that  
10 would indicate when that material, the methylene chloride and  
11 trichloroethane, were sent to the yard?

12 A No, I'm not.

13 Q If there is any record of that transfer, I'd like  
14 to have a copy of that as well?

15 A It would be a yard transfer ticket. We make them  
16 out on the job sites so there's record going either  
17 direction.

18 Q I'd like to go off the record.

19 (At this time an off-the-record discussion was had)

20 Q We have just a few follow-up questions. I'm going  
21 to let Wally ask the questions.

22 QUESTIONS BY MR. NIED:

23 Q The first question is I'm sure during your  
24 construction phase that there was some surveying of  
25 elevations?

1 A Yes.

2 Q Do you have any idea, do you have records of those  
3 elevations.

4 A Yes.

5 Q Particularly the elevation of the trailer?

6 A Yes, somewhere we do because I knew what the top  
7 of the wall was to the hundredth. I don't know any more, but  
8 I remember that we had it so we could get some sort of idea  
9 when the river level was going to come up to a certain grade  
10 so you knew when it was going to hit the top of the wall.  
11 Where the trailer was, I knew it was about 18 inches higher.

12 Q But you do have a surveyed elevation of the top of  
13 that sea wall?

14 A Yes somewhere.

15 Q From which one could make a scientific accurate  
16 measurement of how much water at the crest was above that  
17 point?

18 A We should have originally before we started the  
19 project. We had a local surveying company up there perform  
20 an survey. So that we made sure everything was right when we  
21 started and they established the bench mark. There might not  
22 be on the sheet pile.

23 Q There are bench marks associated with the --

24 A Are you familiar with Quincy at all?

25 Q Yes.

## PERRY REPORTING SERVICE

1 A That's the only surveying company up there.  
2 Quality Surveying Company up there, and they established and  
3 give us the drawing of the elevations and locations.

4 Q So you were aware of the accurate surveyed  
5 elevations?

6 A Yes.

7 Q Of the top of the Lea wall?

8 A Yes, those numbers were readily in my mind six  
9 years ago. They are a little hazy now.

10 Q The last question has to do with you had 55 gallon  
11 drum of Penn Sea. and Metacote?

12 A I believe that's correct.

13 Q When you went to transfer it from the 55 gallon  
14 drum to a smaller container --

15 A Yes.

16 Q You did not utilize it out of that 55 gallon drum,  
17 what mechanism did you utilize to transfer?

18 A We put a bung on it.

19 Q It had a bung?

20 A It had a bung hole. There is a rolling dolly type  
21 of lift where you can pitch the drum a little bit set it on  
22 this thing and lay it over and lay down -- it's really just  
23 like a rack. We put it on that rotate it over, agitate them  
24 and then roll them into position and poke the bung and get  
25 what else you needed out of it.



## PERRY REPORTING SERVICE

1 Q So you would simply tip it and pour it after it  
2 was agitated?

3 A Right.

4 Q Did you agitate through a bung previous?

5 A Yes.

6 Q To pour a full drum, would you think it had a vent  
7 bung as well as a larger bung?

8 A I'm sure it did. I'm speculating now, but common  
9 practice is.

10 Q But as far as a third bung on any of these, you're  
11 --

12 A No, I can only tell you that I'm very well aware  
13 that some had two bungs on top and some have a side bung.  
14 Whether these had side bungs or not I can not tell you. I  
15 don't know. They very well could have or not have.

16 Q But side bungs are functional when one uses a rack  
17 and installs a hose to distribute that product. You never  
18 used a rack?

19 A Not to my knowledge to take it out of the side  
20 bung, no. Not to my knowledge.

21 QUESTIONS BY MR. HERSH:

22 Q A couple of short follow-up questions. When the  
23 flood occurred in October of 1966, was the fence left in  
24 tact?

25 A Yes.

1 Q Was it destroyed in any area or knocked down in  
2 any area?

3 A No, I can't really answer that question. There  
4 was no major damage to the fence, the cyclone fence on the  
5 south side of the project, the cyclone fence on the south  
6 side project, of course, was absolutely undamaged and along  
7 this side here --

8 Q This side being the north side?

9 A It was redwood snow fence across there.

10 Q And there was a fence on the north, south, and  
11 east sides and water on the west side?

12 A Right. We extended our fence out to keep people  
13 from getting access from the bank. We extended our fence out  
14 18 inches so you couldn't climb around and get back into the  
15 job site.

16 Q Were any materials stored outside of the fence  
17 during the flood stage, the 1986 flood stage?

18 A I'm sure that materials were stored on the other  
19 side of the railroad tracks up on the high ground because we  
20 were running out of room to keep materials stored in here and  
21 still keep it out of the water. So we wound out swinging a  
22 lot of material up and out of here to the other side of the  
23 railroad track. It was a difficult job. There was power  
24 line feed in this way, and it was a tough job, but we stored  
25 a lot of material over there.

1 Q Anywhere else?

2 A There was nothing on this side.

3 Q This side being the south side?

4 A Yes, the public access ramp is right there and on  
5 this side --

6 Q But the record reflect that's the north side.

7 A Reflect the north side. There was really no room  
8 to store anything out there because it would have been under  
9 water by a lot. We're talking about a drop off there that  
10 would probably be -- again, you'll have to bear with me that  
11 I make a shot at about a 10 foot drop to the existing ground  
12 grade and another two foot drop to the water, and you would  
13 have been under water there 10 or 12 feet. We very well may  
14 have left things like sections of H-beam that we could  
15 squeeze in over there and that type of material, but outside  
16 of that I really, we did have some material out there I'm  
17 sure.

18 Q Did the flood water get up to rock roadway?

19 A Yes, they did. There was a ditch on either side  
20 of the rock roadway and water was in the ditches and a couple  
21 spots across the roadway, but it's not level.

22 Q Was there a flow of water or standing water?

23 A It was like standing water, but it was there.

24 Q Were barges still going up and down or other boats  
25 and materials going up and down the Mississippi river during

1 this flood?

2 A No, there were none.

3 Q None at all except for --

4 A They couldn't until they reached certain stage  
5 because they were too high to get under our bridge. May be I  
6 better quality, the big barges couldn't pass and they were  
7 withheld downstream. I don't believe there was any barges,  
8 but that's a comment I'm not for sure myself. There might be  
9 something small ones got under there.

10 Q Which side of the bridge did McCarthy unload their  
11 barges on?

12 A 99.9 percent of the work was done on the Illinois  
13 side.

14 Q You were saying that you didn't think during the  
15 flood stage that the barge could pass under?

16 A Right.

17 Q The barge had to travel north to get to the  
18 bridge?

19 A You mean our barge?

20 Q Yes.

21 A I thought you would talking tow traffic.

22 Q Your barge?

23 A Our barge could get underneath it. We had a small  
24 construction barge. It could make it underneath it fine.  
25 Cranes and that type equipment could make it underneath

1 there. Whether we moved cranes underneath the bridge to the  
2 opposite side I don't know. Our work activities were  
3 generally within 200 feet north of our structure and 200 feet  
4 south of the structure and our cranes could reach across the  
5 structure if they had to and cables weren't in the way. So  
6 I'm not sure.

7 Q Did the barge traffic cause waves?

8 A Yes, it did.

9 Q Large waves?

10 A Are you talking about big tow traffic.

11 Q During the flood time?

12 A My barges didn't, no. And there were very few  
13 other barges coming upstream if at all. That's all I can  
14 tell you.

15 Q When you observed the commercial tow barges how  
16 high were the waves?

17 A The big ones would throw up a pretty good wave and  
18 they would actually even -- you could feel it if you were on  
19 the crane barge, you could feel material barge, you would  
20 feel it move. But they wouldn't set there and bounce. Our  
21 little safety boats would be trying to run like hell to get  
22 out of the way. But the big ones would cause a movement.

23 Q If you were looking at the sheet metal wall or  
24 sheet pile wall, how high up would the wave hit, would it be  
25 a difference of two feet, three, four feet?

## PERRY REPORTING SERVICE

1           A       No normally it would just about maybe eight or 10  
2   inch wave, by the time it got that far out of the channel it  
3   would settle down, but I can't recall a wave hitting the  
4   sheet pile wall that was more than a foot high. I would  
5   rather say eight inches.

6           Q       Okay. Do you have anything.

## CROSS EXAMINATION

7  
8           QUESTIONS BY MR. STRONG:

9           Q       I just have a few things to put on the record. To  
10   the best of your knowledge, water never reached the trailer?

11          A       It never reached the trailer through December of  
12   1980.

13          Q       And you never heard anyone say that the water  
14   reached the trailer or that the trailer was under water, or  
15   that any water --

16          A       No, I was there full-time. No, it didn't happen  
17   and nobody said that, no.

18          Q       Okay. And how could you see the current from your  
19   stage decks, the river current?

20          A       From the office trailer?

21          Q       From the general Exhibit A?

22          A       Yes, the river except for the trailers that we had  
23   parked here. If you walked past the trailers the river was  
24   wide open you could see it a long distance upstream and  
25   downstream.

1 Q How far out would you say the current or channel  
2 was?

3 A Again, I have to speculate, but if my memory  
4 serves it was about 500, 400, 300 feet. It was pretty far  
5 out before you got to the actual channel. The river makes a  
6 bend and they had to swing a little closer than normal.

7 MR. HERSH: Which way does it bend, towards  
8 Illinois or toward Missouri side?

9 THE WITNESS: If you say that it comes towards  
10 the -- it's coming down in straight then it will hook to the  
11 Missouri side because almost to the Illinois side and then  
12 hooks and heads back across stream.

13 MR. NIED: The outside of the curve is on the  
14 Illinois side?

15 THE WITNESS: The outside of the curve is on  
16 the Illinois side.

17 MR. SPRONG: I have nothing further.

18 DIRECT EXAMINATION:

19 QUESTIONS BY MR. HERSH:

20 Q Is there a current that occurs from Quincy Bay  
21 during flood stage?

22 A I'm not that kind of river expert. The current is  
23 about three miles an hour. You mean an undertow type of  
24 situation?

25 Q Does the current pick up in a flood?

Q I think we're done. It is my understanding that you will be receiving the original, you can review it, indicate the changes that are appropriate, your attorney will help you with that, and submit that as the final copy.

Q Thank you for coming.

10 (SIGNATURE OF WITNESS NOT WAIVED BY CONSENT OF COUNSEL AND  
11 AGREEMENT OF WITNESS)



PERRY REPORTING SERVICE

000359

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

-----  
NICHOLAS TUNGATE

Subscribed and sworn before me on the \_\_\_\_\_  
day of \_\_\_\_\_, 1990.

-----  
Notary Public

1 COUNTY OF ST. LOUIS )  
2 ) SS.  
3 STATE OF MISSOURI )

4 I, Jeanne H. Morgan, a Certified Shorthand Reporter  
5 and Notary Public, within and for the County of St. Louis,  
6 State of Missouri, do certify that pursuant to agreement  
7 there came before me at the offices of Federal Courthouse, in  
8 the City of St. Louis, State of Missouri, NICHOLAS TUNGATE, a  
9 witness of legal age, being first duly sworn to testify the  
10 whole truth of his knowledge, touching the matters in  
11 controversy herein that he was examined and his examination  
12 was reduced to shorthand by me on that day, between the hours  
13 at the place and in that behalf first aforesaid and later  
14 transcribed into typewriting, that signature of witness was  
15 waived by consent of counsel and agreement of witness and his  
16 deposition is now herewith returned.

17 IN WITNESS WHEREOF, I have hereunto set my hand and  
18 seal this the \_\_\_\_\_ day of \_\_\_\_\_, 1990.

19 My commission expires August 2, 1992.  
20  
21  
22  
23  
24  
25

\_\_\_\_\_  
Notary Public